



Association of American
State Geologists



United States
Geological Survey

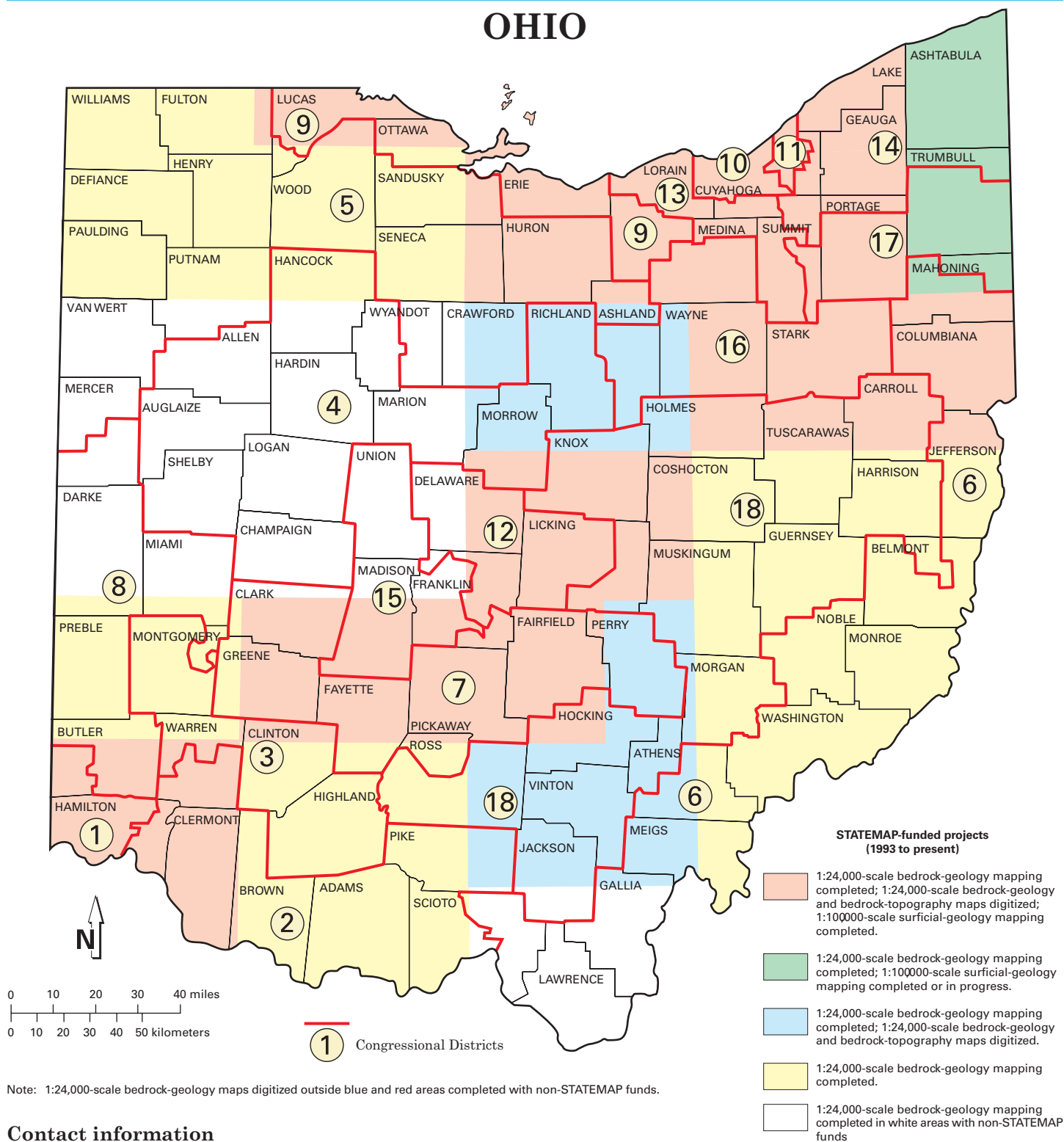


science for a changing world

National Cooperative Geologic Mapping Program

STATEMAP Component: States compete for federal matching funds for geologic mapping

OHIO



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Summary of STATEMAP Geologic Mapping Program in Ohio

Federal Fiscal Year	Project Title, Scale	State Dollars	Federal Dollars	Total Project Dollars
93	Bedrock geology of 247 7.5-minute quadrangles in northwestern and southwestern Ohio, 1:24,000	\$239,071	\$109,874	\$348,945
94	Bedrock geology of 168 7.5-minute quadrangles in north- and south-central Ohio, 1:24,000	\$298,577	\$105,000	\$403,577
95	Bedrock geology of 124 7.5-minute quadrangles in northeastern Ohio, 1:24,000	\$99,910	\$40,000	\$139,910
96	Bedrock geology of 112 7.5-minute quadrangles in southeastern Ohio, 1:24,000	\$86,155	\$86,155	\$172,310
96	Digitization of bedrock-geology and bedrock-topography maps for north- and south-central Ohio	\$47,026	\$47,026	\$94,052
97	Surficial geology of the Cincinnati and Falmouth 30 x 60 minute quadrangles (Ohio portion), 1:100,000	\$118,316	\$112,249	\$230,565
98	Surficial geology of the Lorain and Put-in-Bay 30 x 60 minute quadrangles, 1:100,000	\$84,815	\$84,815	\$169,630
99	Surficial geology of the Cleveland South 30 x 60 minute quadrangle, 1:100,000	\$103,803	\$103,802	\$207,605
00	Surficial geology of the Canton and East Liverpool 30 x 60 minute quadrangles (Ohio portion), 1:100,000	\$99,877	\$99,877	\$199,754
01	Surficial geology of the Newark 30 x 60 minute quadrangle, 1:100,000	\$99,798	\$99,798	\$199,596
02	Surficial geology of the western portion of the Lancaster 30 x 60 minute quadrangle, 1:100,000	\$133,614	\$74,730	\$229,604
03	Surficial geology of a portion of the Springfield 30 x 60 minute quadrangle, 1:100,000	\$95,990	\$95,990	\$191,980
04	Surficial geology of the Cleveland North and Toledo 30 x 60 minute quadrangles (Ohio portion), 1:100,000	\$97,020	\$97,020	\$194,040
05	Surficial geology of the Ashtabula and Youngstown 30 x 60 minute quadrangles (Ohio portion), 1:100,000	\$184,879	\$73,525	\$258,404
06	Surficial geology of the Mansfield 30 x 60 minute quadrangle, 1:100,000	\$124,380	\$89,872	\$214,252
	TOTALS	\$1,913,231	\$1,340,993	\$3,254,224

The STATEMAP component of the National Cooperative Geologic Mapping Program (NCGMP) has enabled the Ohio Department of Natural Resources (ODNR), Division of Geological Survey (DGS) to rapidly and efficiently produce new bedrock and surficial geologic-map information for Ohio. With STATEMAP support, the DGS has, over the past thirteen years, produced more than 2,500 1:24,000-scale maps depicting bedrock geology, bedrock structure, and buried bedrock topography. STATEMAP funding also has been used to develop a statewide digital-map database of geologic information, and to support production of 1:100,000-scale surficial-geology maps for the Ohio portions of twelve 30 x 60 minute quadrangle areas. This new geologic-map information is being used by public- and private-sector entities to address a wide range of critical issues that include: (1) identification and protection of ground-water resources, (2) identification of geologic hazards, (3) seismic risk assessment, (4) site selection for waste-disposal facilities, (5) highway planning, (6) mineral resource exploration and production, and (7) land-use planning.

In 2004, the combined sale of crushed stone and sand and gravel in Ohio reached 137,965,834 tons. Most of this aggregate was sold for transportation-infrastructure repair and expansion. Maintaining the state's highway system in the 21st century and sustaining a healthy and growing state economy are dependent on an adequate supply of high-quality, competitively priced construction aggregate. Ohio's crushed stone and sand and gravel producers are using three-dimensional surficial geology maps produced through the STATEMAP program to identify target areas for detailed aggregate-resource exploration and assessment. The Ohio Department of Transportation (ODOT) and the DGS have been building a statewide geographic information system (GIS) of bedrock-geology, bedrock-topography, and structure contour maps produced under the STATEMAP program. When completed, this GIS will be used by ODOT to more effectively and efficiently consider geologic conditions in highway planning and design processes.

